442 182 /436/ The more inflexible the raw material is from which our Indian manufactures his possessions, the more convincingly apparent are the creative and organizing power of his spirit, his keen gift of observation, and his dexterity. Repeated attempts must have preceded the shapes and the individual pieces chosen for the permanent store of possessions of this tribe and retained by many generations. If we examine each individual item, its extreme appropriateness in every respect becomes so clear that we realize hardly anything can be improved to any extent which would at the same time also increase the efficiency of the object. By itself the object looks poor and artless, but if you see how it is applied and used and with what little effort it functions very accurately, you cannot refrain from marveling at its merits.

178 411 231 If we compare the accounts since the middle of the nineteenth century with the reports from the first two centuries in which Europeans and Yamana came together, it is apparent that a change has taken place in the utilization of individual objects. By this I do not mean that European goods, such as knives and axes, have been taken over, but that bow and arrow were gradually superseded by the sling. The real reason for this -- to mention the point already -- seems to be the introduction and swift adoption everywhere of the dog. The dog serves the Indian in various ways in his hunt for otter. We know that it is not easy to aim accurately with bow and arrow from a canoe. I have frankly expressed the opinion that only after the Europeans discovered the Yamana did the dog become their inevitable companion, which is how travelers have designated this animal since the middle of the last century. Aside from this small change, all the things that are used daily have been preserved in their original form until the present time.

176 The implements and weapons of our Fuegians cannot be too thoroughly investigated and observed in their use. They reveal a gift of creative invention in these Indians, who have been wrongly underestimated and so often pitied as the "most miserable people." Yet they have created tools for themselves which make it very much easier for them to obtain food and to protect their bodies.

/508 cont./

12. Technical Skills

511 The material possessions of these southernmost Fuegians seem at first glance unusually frugal and poor. If we look more carefully, however, we are surprised at the considerable variety of implements and tools. Hence, our natives are not altogether destitute. In the variety of their utensils they without doubt considerably surpass the neighboring Selk'nam. The canoe alone is such an inestimably valuable means of transportation that it cannot be compared with travel on foot.

182 176 The environment into which our Yamana were placed was a good teacher. With their own resourcefulness and keen gift of observation, with the knowledge gained by experience through short, successive generations, they finally created weapons and tools of such high efficiency that it could hardly be noticeably increased within the possibilities of development originally afforded them. Anyone who will make an effort to gain an insight into the mechanics of each of the implements used by the Fuegians and the physical forces operating it will pay high tribute to their creative power.

Even Bridges (k):240 who was in a position to observe them for decades in closest proximity bowed to their ability, and offerred the following brilliant testimony, probably with not a little inner resistance: "The natives have evolved all the qualities most /509/ useful for the life they live; their canoes are perfect specimens of their kind and the same can be said of all their utensils and implements. With the material at their disposal I do not know how these could be improved. They are perfectly adapted to the soil and climate of the country in which they live" /translated from Spanish/. Behind the unprepossessing form and the pitiful simplicity of Fuegian implements is hidden an unsurpassed suitability.

443 In general each person makes what he needs in material possessions with his own hands and for himself alone. Exceptions are those things which, in the normal household life, are needed by the family or by the husband and wife equally, and which, accordingly, he provides for her and she for him. Manufacture is, therefore, an individual matter. There is no special class of

3: Lothrop E-5 (1924-1925) 1928
5385 Yahgan 5385

When fully equipped, the Yahgan canoe carried the following articles: 501

two or more paddles	dip-net
three kinds of harpoons	club
two fire-tongs	grass mooring rope or thong
four spears (fish, seal, crab, and limpet)	bark bucket
	fish-line.

Such was the bark canoe in which these Indians often ventured far from shore and even attacked whales. Its great virtue was that it could be made with few tools; indeed in an emergency it could be created with no more than fire and a knife. Furthermore, its high pointed ends made it seaworthy. On the other hand, the seams often leaked and the beech-bark is brittle—much more so than the birch-bark of the North American canoes. The canoes of bark found nearest to Tierra del Fuego are those of Brazil. Their construction is so different, however, that there seems no possibility of relationship between the two types.

DUGOUT CANOE

The first dugout canoe used by the Yahgan was made near Ushuaia about 1880 by an Indian known as "John Furness." This innovation apparently was an independent invention, instigated through the introduction of metal tools during the previous decade. At any rate the idea rapidly became popular, for the advantage of the stronger construction over the bark canoe was patent, and indeed the Alacaluf soon seized upon this type and abandoned their plank canoes. 501 176 177

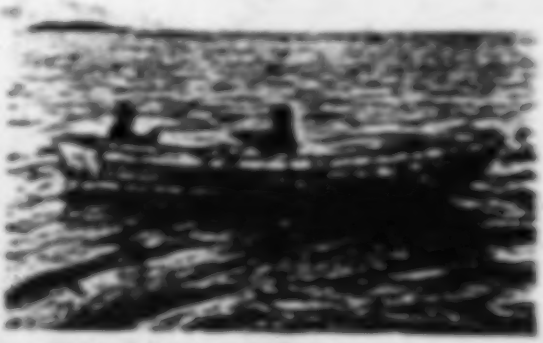

FIG. 11a.—Yahgan dugout canoe. (Courtesy of J. L. Wehl, Esq.)